

A valve timing control system for an internal combustion engine has: a drive force transmitter or a chain sprocket; a cam shaft; a housing, a vane rotor; an advanced angle chamber and a delayed angle chamber; an oil pressure conveyer; a protrusion shaft; a target plate; and a sensor. The protrusion shaft is formed on at least one of the vane rotor and the housing, and protrudes forward. The target plate is mounted on at least one of the vane rotor and the housing. The target plate is formed substantially flat through a press molding, and is press fitted to the protrusion shaft. The target plate has a plurality of detector protrusions and one index protrusion. The detector protrusion and the index protrusion are equal in width.